CLAIMS:

1.   A method of processing an incoming data stream that contains a stream of
encrypted data and a stream of messages, data in successive segments of the stream of
encrypted data being decryptable with successive decryption information from the messages,
the method comprising

5   - storing the stream of encrypted data;
        - storing items with decryption information from the stream of messages;
        - storing synchronization information linking respective points in the stored stream of
        encrypted data to respective ones of the items with decryption information, the
        synchronization being stored so that it is retrievable independent of the stream;

10   - replaying a stored part of the stream of encrypted data in an abnormal temporal pattern;
        - retrieving the items with decryption information for the points in said stored part during
        said replaying;
        - combining the retrieved items with decryption information with the stream during replay at
        times selected under control of the synchronization information, the items which are

15   combined being selected and/or a time when the items are combined with the stream being
        selected, dependent on the synchronization information and the abnormal temporal pattern.

2.   A method according to claim 1, wherein the stream of messages contains a
plurality of messages that repeat the same decryption information, the method comprising

20   - subsampling messages from said stream of messages, only items with decryption
        information from subsampled ones of the messages being stored, and
        - the synchronization information linking groups of points in the stored stream of encrypted
        data to respective ones of the subsampled items.

25 3.   A method according to Claim 2, the method comprising
        - detecting a transition after which the messages contain decryption information different
        from decryption information in messages before the transition;
        - subsampling at least one of the subsampled messages at a predetermined position relative to
        the transition.

4.   A method according to Claim 1, wherein the method comprises

- constructing a list of data pointers to selected parts of the stream of encrypted data, each data pointer being associated with a selected one of the items of decryption information that enables decryption of the encrypted data pointed at by the pointer;

- determining, during replay, whether replay will access encrypted data in the part pointed at by a particular pointer in said list;

- upon said determining using the list to supply decryption information from the item associated with the particular pointer.

5.   A method according to Claim 1, wherein the encrypted data contains image frames, and update information for deriving additional image frames by updating the image frames, the method comprising

- constructing a list of data pointers to selected parts of the stream of encrypted data that contain image frames, each data pointer being associated with a selected one of the items of decryption information that enables decryption of the encrypted data pointed at by the pointer;

- selecting, during replay, the parts of the stream pointed at by pointers in the list;

- using the list to supply decryption information from the item associated with each pointer.

6.   A method according to Claim 1, the method comprising

- decrypting the items of decryption information from the incoming data stream and re-encrypting the items of decryption information with a recording key prior to storage;

- storing the reencrypted items of decryption information separately from the stream of encrypted data.